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## Correspondence

# Narrative medicine: A good tool to improve the treatment of patients with periodontitis

Periodontitis is a preventable and treatable chronic disease associated with oral biofilm and several systemic effects and comorbidities that may contribute to its severity.<sup>1</sup> It is well-known that the adequate oral hygiene instruction to patients with periodontitis can effectively decrease the accumulation of dental biofilm to improve periodontal health. However, the definitive cure of periodontitis does not yet exist, periodontitis could be well-controlled through adequate treatment with good oral hygiene instruction.

Improving patient–dentist communication is usually overlooked in daily dental practice. Narrative medicine with empathy, reflection, profession, and trust has been proposed as a model for facilitating patient–dentist discourse,<sup>2</sup> shared decision making,<sup>3</sup> and holistic oral healthcare.<sup>4</sup> Clinical dentistry is not only for caring the patient’s disease, but also for promoting the disease healing. The treatment outcome of periodontitis is based on the compliance of patients. Therefore, the good dentist–patient relationship with structured communication would have the positive effects on periodontal treatment.

In this preliminary study, the author proposed that narrative medicine could not only improve the patient–dentist relationship, but also hence benefit for the periodontal prognosis. This study was performed in the Department of Periodontics, Chung Shan Medical University Hospital, Taichung, Taiwan. Total 30 adult volunteers suffered with periodontitis were recruited with their informed consents. Dental interns thoroughly explained the etiology of periodontitis and importance of plaque control for periodontal therapy. Narrative-based oral hygiene instruction was illustrated with more colorful picture within oral health leaflet compared to traditional text description. After patients finished phase I periodontal therapy, plaque

index (PI) and probing depth (PD) were obtained to compare the data at baseline and re-evaluation after 4 weeks. As shown in [Table 1](#), the score of PI and PD were found to improve after phase I therapy. Moreover, 80% patients had the positive feelings to such narrative-based oral hygiene instruction and in compliance with plaque control by themselves.

To the best of our knowledge, this pilot report demonstrated the implementation of narrative medicine had the positive effect on periodontal therapy. Consistently, a recent study showed that narrative medicine acted as a good education tool to improve oral hygiene instruction.<sup>5</sup> The reason may be due to the better relationship based on listening and understanding that can help patients be more adherent to treatment as well as to improve their plaque control skill. However, the limitations of this study still need to be addressed. The severity of periodontitis, sex, age, and oral habits were not further analyzed. In addition, relatively large size, comparison group, and longitudinal design are required to prove the effectiveness of narrative medicine into clinical dentistry.

Taken together, narrative medicine can break the barrier between the patient and dental professional team during periodontal treatment to achieve a satisfied outcome. Narrative medicine seems as a good medium to improve the treatment of patients with periodontitis. Most

**Table 1** The data of plaque index and pocket depth at the baseline and the re-evaluation after 4 weeks.

	Baseline	Re-evaluation
Plaque index (%)	89.59%	45.18%
Probing depth (mm)	3.96 mm	3.03 mm

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oral diseases are preventable and necessary for patients' compliance with treatment. The implementation of narrative medicine into treatment protocol of other oral disease is expected.

### Conflicts of interest

The authors have no conflicts of interest relevant to this article.

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### References

1. Yang LC, Yu HC, Chang YC. The recent new findings of periodontal-systemic connection from Taiwan's National Health Insurance Research Database. *J Dent Sci* 2021;16:789–90.
2. Huang YK, Chang YC. Narrative medicine as a good tool for patient-dentist discourse. *J Dent Sci* 2022;17:612.
3. Huang YK, Chen YT, Chang YC. The implementation of shared decision-making in clinical dentistry: opportunity and change. *J Formos Med Assoc* 2022;121:1890–1.
4. Huang YK, Chen YT, Chang YC. Initiating narrative medicine into dental education: opportunity, change, and challenge. *J Formos Med Assoc* 2021;120:2191–4.
5. Huang YK, Lai MY, Chang YC. Interns' perceptions of narrative medicine to facilitate oral hygiene instruction for periodontitis patients. *J Dent Sci* 2023;18:921–2.

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